

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) In an electronic device, a method comprising:

receiving a textual input description, the input description including text to be displayed and a first set of textual cross-references associated with segments of the text to be displayed, each textual cross-reference including one or more textual identifiers for the associated segment of the text to be displayed;

receiving a textual output description, the output description including text to be displayed and a second set of textual cross-references associated with segments of the text to be displayed, each textual cross-reference including one or more textual identifiers for the associated segment of the text to be displayed;

identifying a first cross-reference in the first set of cross-references associated with a segment of the text to be displayed in-an the input description using the electronic device;

searching-a plurality the second set of cross-references in-an the output description to identify a second cross-reference that matches the first cross-reference using the electronic device, the second cross-reference matching the first cross-reference when at least one identifier in the second cross-reference matches at least one identifier in the first cross-reference, the second cross-reference being associated with a segment of the text to be displayed in the output description that corresponds to the segment of the text to be displayed in the input description;
and

displaying the segment of the text to be displayed in the input description and the segment of the text to be displayed in the output description together on-the a display.

2. (Previously Presented) The method of claim 1 wherein the input description and the output description include code descriptions expressed in programming languages.

3. (Canceled)

4. (Previously Presented) The method of claim 1 wherein the input description and the output description are expressed in different programming languages.

5. (Previously Presented) The method of claim 1 wherein the input description and the output description are displayed in separate panes of a same window.
6. (Previously Presented) The method of claim 1 wherein the input description and the output description are displayed in separate windows.
7. (Previously Presented) The method of claim 1 further comprising
 - providing a first scrolling tool for scrolling the input description; and
 - providing a second scrolling tool for scrolling the output description.
8. (Previously Presented) The method of claim 7 wherein the first and second scrolling tools include scrolling bars.
9. (Previously Presented) The method of claim 8 wherein in response to controlling one of the first scrolling bar or the second scrolling bar, the other scrolling bar is automatically controlled in proportion to a controlled amount in said one of the first scrolling bar and the second scrolling bar.
10. (Previously Presented) The method of claim 7 further comprising, in response to scrolling one of the input description or the output description, displaying corresponding input description and output description adjacent to the scrolled description on the display.
11. (Currently Amended) In an electronic device, a method comprising:
 - displaying a first textual description and a second textual description together on a display, the first description including displayed text elements and a first set of non-displayed textual cross-references associated with the displayed text elements, the second description including displayed text elements and a second set of non-displayed textual cross-references associated with the displayed text elements, each textual cross-reference including one or more textual identifiers for the associated displayed text element;
 - displaying a first cursor in a first displayed text element in the first description;
 - identifying a first cross-reference in the first set of cross-references associated with the first displayed text element;

searching ~~a plurality~~ the second set of cross-references in the second description to identify a second cross-reference that matches the first cross-reference, the second cross-reference matching the first cross-reference when at least one identifier in the second cross-reference matches at least one identifier in the first cross-reference, the second cross-reference being associated with a second displayed text element in the second description that corresponds to the first displayed text element[[,]]; and

displaying a second cursor in the second displayed text element.

12. (Previously Presented) The method of claim 11 wherein the first cursor and the second cursor are presented in a start position of the input description and the output description.

13. (Previously Presented) The method of claim 11 wherein the first cursor and the second cursor are presented on a same line on the display.

14. (Previously Presented) The method of claim 11 wherein the first and second cursors are presented in a middle of the input description and the output description.

15. (Canceled)

16. (Previously Presented) The method of claim 11 wherein the cross-references include reference numbers to the input description and the output description.

17. (Canceled)

18. (Previously Presented) The method of claim 11 wherein the cross-references are attached to the input description and the output description using the XML (Extensible Markup Language) programming language.

19. (Canceled)

20. (Currently Amended) In an electronic device running a software tool, a method comprising:
displaying a first description and a second description together on ~~the~~ a display;

selecting a first segment in the first description;

in response to selecting the first segment in the first description, selecting a second segment in the second description automatically, the second segment corresponding to the first segment, the correspondence indicating that the second segment is a translation of the first segment; and

connecting a portion in the first segment and a corresponding portion in the second segment through a connection line to indicate that the connected portions in the first and second segments correspond to each other, the portion in the first segment being a subset of the first segment, the portion in the second segment being a subset of the second segment and the correspondence indicating that the portion in the first segment is a translation of the portion in the second segment, at least one of the first segment or the second segment being associated with a first cross-reference and including a second cross-reference associated with the portion in the first segment or the second segment that is connected through the connection line.

21. (Previously Presented) The method of claim 20 wherein the first segment or the second segment is highlighted.

22. (Previously Presented) The method of claim 20 wherein a background of the first segment or the second segment is colored.

23. (Original) The method of claim 20 wherein the first segment includes a plurality of lines.

24. (Original) The method of claim 23 wherein the plurality of lines is highlighted in different colors and corresponding lines in the second segment are highlighted in same colors as the first segment.

25. (Canceled)

26. (Previously Presented) The method of claim 20 wherein the input description in the first segment and the corresponding output description in the second segment make cross-references to each other.

27. (Previously Presented) The method of claim 26 wherein the first segment includes a part of a line in the input description and the part of the line in the first segment makes a different reference to a corresponding part of a line in the second segment.

28. (Previously Presented) The method of claim 23 wherein the first segment includes a plurality of lines and each of the plurality of lines in the first segment makes a different reference to corresponding lines in the second segment.

29. (Original) The method of claim 26 wherein multiple references are made to a common line in the second segment, the common line being shared by more than one line in the second segment.

30. (Previously Presented) The method of claim 26 wherein the first cross-reference is attached to the input description and the second cross-reference is attached to the output description using the XML (Extensible Markup Language) programming language.

31. (Currently Amended) A system for displaying input code and output code corresponding to the input code, the system comprising:

a textual input description including textual input code and a first set of textual cross-references associated with segments of the textual input code, each textual cross-reference including one or more textual identifiers for the associated segment of the textual input code, the textual input code being code written in a programming language for a technical computing environment;

a textual output description including textual output code and a second set of textual cross-references associated with segments of the textual output code, each textual cross-reference including one or more textual identifiers for the associated segment of the textual output code, the textual output code being code generated from the textual input code into code for a programming language that is independent of technical computing environments;

a processor configured to:

identify a first cross-reference in the first set of cross-references associated with a segment ~~in~~ of the input code, and

search ~~a plurality~~ the second set of cross-references ~~in the output code~~ to identify a second cross-reference that matches the first cross-reference, the second cross-reference matching the first cross-reference when at least one identifier in the second cross-reference matches at least one identifier in the first cross-reference, the second cross-reference being associated with a segment ~~in~~ of the output code that corresponds to the segment ~~in~~ of the input code; and

a display for showing the segment ~~in~~ of the input code and the segment ~~in~~ of the output code together.

32. (Previously Presented) The system of claim 31 wherein the processor is further configured to:

generate an input code markup file and an output code markup file, the input code markup file containing the first cross-reference associated with the input code and the output code markup file containing the second cross-reference associated with the output code.

33. (Canceled)

34. (Previously Presented) The system of claim 31 wherein the cross-references include line references to a line of the input code and a corresponding line of the output code.

35. (Previously Presented) The system of claim 31 wherein the cross-references include line references to a line of the output code and a corresponding line of the input code.

36. (Previously Presented) The system of claim 31 wherein the cross-references include references to an element of the input code and a corresponding output code element.

37. (Previously Presented) The system of claim 31 wherein the cross-references include references to an element of the output code and a corresponding input code element.

38. (Previously Presented) The system of claim 31 wherein the processor is further configured to:

provide a graphical user interface element in which the input code and the output code are displayed together.

39. (Previously Presented) The system of claim 31 wherein the processor is further configured to:

display the input code and the output code in separate windows.

40. (Original) The system of claim 31 wherein the input code and the output code are described in a textual format.

41. (Currently Amended) A computer-readable storage medium comprising computer-executable instructions executable in a computer system, the instructions including one or more instructions for:

receiving a textual input description, the input description including text to be displayed and a first set of textual cross-references associated with segments of the text to be displayed, each textual cross-reference including one or more textual identifiers for the associated segment of the text to be displayed;

receiving a textual output description, the output description including text to be displayed and a second set of textual cross-references associated with segments of the text to be displayed, each textual cross-reference including one or more textual identifiers for the associated segment of the text to be displayed;

identifying a first cross-reference in the first set of cross-references associated with a segment of the text to be displayed in ~~an~~ the input description;

searching ~~a plurality~~ the second set of cross-references in an the output description to identify ~~[[i]]~~ a second cross-reference that matches the first cross-reference, the second cross-reference matching the first cross-reference when at least one identifier in the second cross-reference matches at least one identifier in the first cross-reference, the second cross-reference being associated with a segment of the text to be displayed in the output description that corresponds to the segment of the text to be displayed in the input description; and

displaying the segment of the text to be displayed in the input description on one side of ~~the a~~ display and the segment of the text to be displayed in the output description on the other side of the display.

42. (Previously Presented) The medium of claim 41 further comprising one or more instructions for:

- providing a first scrolling bar for scrolling the input description; and
- providing a second scrolling bar for scrolling the output description.

43. (Previously Presented) The medium of claim 42 wherein in response to controlling one of the first scrolling bar or the second scrolling bar, the other scrolling bar is automatically controlled in proportion to a controlled amount in said one of the first scrolling bar and the second scrolling bar.

44. (Currently Amended) A computer-readable storage medium comprising computer-executable instructions executable in a computer system, the instructions including one or more instructions for:

- displaying a textual input description and a textual output description together on a display, the input description including displayed text elements and a first set of non-displayed textual cross-references associated with the displayed text elements, the output description including displayed text elements and a second set of non-displayed textual cross-references associated with the displayed text elements, each textual cross-reference including one or more textual identifiers for the associated displayed text element;

- displaying a first cursor in a first displayed text element in ~~an~~ the input description;
 - identifying a first cross-reference in the first set of cross-references associated with the first displayed text element where the first cursor is displayed;

- ~~searching a plurality~~ the second set of cross-references in the output description to identify a second cross-reference that matches the first cross-reference, the second cross-reference matching the first cross-reference when at least one identifier in the second cross-reference matches at least one identifier in the first cross-reference, the second cross-reference being associated with a second displayed text element in the output description that corresponds to the first displayed text element;

- displaying a second cursor automatically in the second displayed text element in the output description; and

displaying the first displayed text element in the input description on one side of ~~the~~ a display and the second displayed text element in the output description on the other side of the display.

45. (Previously Presented) The medium of claim 44 wherein the input description and the output description which the first cursor and the second cursor are presented to, respectively, make cross-references to each other.

46. (Previously Presented) The medium of claim 45 wherein the cross-references include reference numbers to the input description and the output description.

47. (Currently Amended) A computer-readable storage medium comprising computer-executable instructions executable in a computer system, the instructions including one or more instructions for:

- displaying an input description on one side of a display and an output description on the other side of the display;

- marking a first segment in the input description;

- in response to marking the first segment in the input description, marking a second segment in the output description automatically, the second segment corresponding to the first segment, the correspondence indicating that the second segment is a translation of the first segment; and

- connecting a portion in the first segment and a corresponding portion in the second segment through a connection line to indicate that the connected portions in the first and second segments correspond to each other, the portion in the first segment being a subset of the first segment, the portion in the second segment being a subset of the second segment and the correspondence indicating that the portion in the first segment is a translation of the portion in the second segment, at least one of the first segment or the second segment being associated with a first cross-reference and including a second cross-reference associated with the portion in the first segment or the second segment that is connected through the connection line.

48. (Previously Presented) The medium of claim 47 wherein the input description in the first segment and the corresponding output description in the second segment make cross-references to each other.

49. (Previously Presented) The medium of claim 48 wherein the first segment includes a plurality of lines and each of the plurality of lines in the first segment makes a different reference to corresponding lines in the second segment.

50. (Previously Presented) The method of claim 1, wherein the first cross-reference and the second cross-reference are coded in the Extensible Markup Language (XML) programming language.

51. (Previously Presented) The medium of claim 41, wherein the first cross-reference and the second cross-reference are coded in the Extensible Markup Language (XML) programming language.

52. (Previously Presented) The method of claim 1, wherein the first cross-reference is in the input description.

53. (Previously Presented) The method of claim 11, wherein the first description is generated from the second description.

54. (Previously Presented) The method of claim 11, wherein the second description is generated from the first description.